## Vermont Forest Health



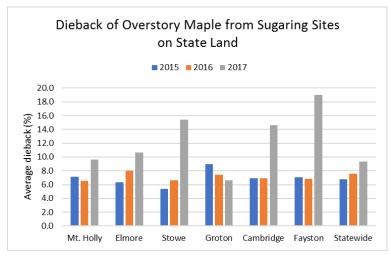


## Results For 2017

In 2012, forest health monitoring plots were established in seven sites on state lands under license agreement for maple sugaring. Plot design and measurements are the same as for the 30 other sugar maple health monitoring plots in Vermont previously established under the North American Maple Project (NAMP). One site, in Andover, has since been discontinued as a sugarbush.

The data presented here cover the years of the current Forest Tent Caterpillar (FTC) outbreak in Vermont (beginning in 2016). Abnormally dry conditions occurred in both 2016 and 2017, and the combination of these two stressors likely resulted in the increase in dieback on many sites. Foliar transparency increased at the Stowe site, which was partially defoliated by FTC. The Elmore site was treated with B.t.k. in 2017 to prevent defoliation.

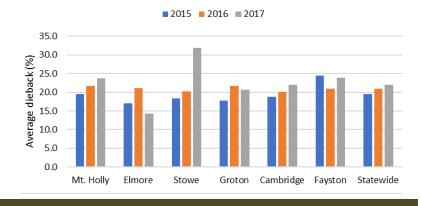
The 2017 sugar maple condition ratings on the six sites were similar to average ratings for the 30 NAMP plots statewide, which include sugarbush and untapped maple stands scattered throughout the state. Average dieback statewide was 9.3%, while sugaring sites on state lands averaged 10.4%. Transparency was similar with an average of 22% statewide, and 21.5% on sugaring sites on state lands.



Dieback evaluates new dead twigs. Higher ratings indicate current or past stress effects on tree health.

Foliage transparency evaluates the density of leaves. Higher ratings indicate thinner foliage, and reflect current year stress.

## Foliar Transparency of Overstory Maple from Sugaring Sites on State Land





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